WHAT IS CLAIMED IS:

1 1.   A method for recovering a dropped table, comprising:

2   specifying one or more table spaces prior to one or more tables being dropped

3 from the specified one or more table spaces;

4   when a table is to be dropped from the one or more specified table spaces,

5   storing a table identifier, a time stamp, and table definition attributes for

6 the dropped table in a data structure; and

7   dropping the table; and

8   upon receiving a request to restore a table space from the one or more specified

9 table spaces, recovering each of the one or more tables in the table space being restored

10 using the data structure.

1 2.   The method of claim 1, wherein the table to be dropped from the one or

2 more specified table spaces is a first table and further comprising:

3   when a second table is to be dropped from a table space other than the one or

4 more specified table spaces, dropping the second table without modifying the data

5 structure.

1 3.   The method of claim 1, wherein specifying one or more table spaces

2 comprises setting a dropped table recovery flag for each of the one or more table spaces.

1 4.   The method of claim 3, wherein the dropped table recovery flag may be

2 changed.

1 5.   The method of claim 1, after restoring the table space, further comprising:

2   rolling forward the table space containing the dropped table to a time reflected in

3 the time stamp by replaying a set of stored transactions up to the time reflected in the time

4 stamp, wherein information about the dropped table is stored in the data structure;

5   copying data from the dropped table in the rolled forward selected table space to a

6 storage data structure;

7   accessing the table definition attributes for the dropped table, in the data structure,

8 to create a new table in the table space; and

9   loading the data in the storage data structure into the new table.

1   6.   The method of claim 5, wherein the storage data structure is a flat file.

1   7.   The method of claim 1, wherein during the recovery of one or more tables

2 in the table space to be restored, parts of the database excluding the table space to be

3 restored are accessible to users.

1   8.   The method of claim 1, wherein the data structure is a dropped table

2 history data structure.

1   9.   A system for recovering a dropped table, comprising:

2   means for specifying one or more table spaces prior to any tables being dropped

3 from the specified one or more table spaces;

4   when a table is to be dropped from the one or more specified table spaces,

5   means for storing a table identifier, a time stamp, and table definition

6 attributes for the dropped table in a data structure; and

7   means for dropping the table; and

8   means for, upon receiving a request to restore a table space from the one or more

9 specified table spaces, recovering each of the one or more tables in the table space being

10 restored using the data structure.

1   10.   The system of claim 9, wherein the table to be dropped from the one or

2   more specified table spaces is a first table and further comprising:

3   when a second table is to be dropped from a table space other than the one or

4   more specified table spaces, means for dropping the second table without modifying the

5   data structure.

1   11.   The system of claim 9, wherein means for specifying one or more table

2   spaces comprise means for setting a dropped table recovery flag for each of the one or

3   more table spaces.

1   12.   The system of claim 11, wherein the dropped table recovery flag may be

2   changed.

1   13.   The system of claim 9, after restoring the table space, further comprising:

2   means for rolling forward the table space containing the dropped table to a time

3   reflected in the time stamp by replaying a set of stored transactions up to the time

4   reflected in the time stamp, wherein information about the dropped table is stored in the

5   data structure;

6   means for copying data from the dropped table in the rolled forward selected table

7   space to a storage data structure;

8   means for accessing the table definition attributes for the dropped table, in the

9   data structure, to create a new table in the table space; and

10   means for loading the data in the storage data structure into the new table.

1   14.   The system of claim 13, wherein the storage data structure is a flat file.

1   15.   The system of claim 9, wherein during the recovery of one or more tables

2   in the table space to be restored, parts of the database excluding the table space to be

3   restored are accessible to users.

1   16.   The system of claim 9, wherein the data structure is a dropped table history

2   data structure.

1   17.   A program for recovering a dropped table, wherein the program is

2   implemented in a computer readable medium and is capable of causing operations to be

3   performed, the operations comprising:

4   specifying one or more table spaces prior to any tables being dropped from the

5   specified one or more table spaces;

6   when a table is to be dropped from the one or more specified table spaces,

7   storing a table identifier, a time stamp, and table definition attributes for

8   the dropped table in a data structure; and

9   dropping the table; and

10   upon receiving a request to restore a table space from the one or more specified

11   table spaces, recovering each of the one or more tables in the table space being restored

12   using the data structure.

1   18.   The program of claim 17, wherein the table to be dropped from the one or

2   more specified table spaces is a first table and wherein the operations further comprise:

3   when a second table is to be dropped from a table space other than the one or

4   more specified table spaces, dropping the second table without modifying the data

5   structure.

1   19.   The program of claim 17, wherein the operations for specifying one or

2   more table spaces further comprise setting a dropped table recovery flag for each of the

3   one or more table spaces.

1   20.   The program of claim 17, wherein the dropped table recovery flag may be

2   changed.

1   21.   The program of claim 17, wherein after restoring the table space, the

2   operations further comprise:

3   rolling forward the table space containing the dropped table to a time reflected in

4   the time stamp by replaying a set of stored transactions up to the time reflected in the time

5   stamp, wherein information about the dropped table is stored in the data structure;

6   copying data from the dropped table in the rolled forward selected table space to a

7   storage data structure;

8   accessing the table definition attributes for the dropped table, in the data structure,

9   to create a new table in the table space; and

10   loading the data in the storage data structure into the new table.

1   22.   The program of claim 21, wherein the storage data structure is a flat file.

1   23.   The program of claim 17, wherein during the recovery of one or more

2   tables in the table space to be restored, parts of the database excluding the table space to

3   be restored are accessible to users.

1   24.   The program of claim 1, wherein the data structure is a dropped table

2   history data structure.